Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Issues Related to Allegations of	)	IB Docket No. 13-147
Warehousing and Vertical Foreclosure in the	)	
Satellite Space Segment	)	

To: The Commission

COMMENTS OF SES S.A.

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SUMMARY

SES is surprised that the Commission has chosen to expend scarce staff resources on the instant proceeding, which explores integrators' outdated and unsupported allegations of anticompetitive conduct in the satellite industry. In its most recent review of satellite competition, the Commission invited the integrators to come forward with specific evidence to buttress their claims, but the resulting record contained insufficient evidence for the Commission to make findings. That should have concluded the matter – there was no apparent reason for the Commission to expect that a standalone proceeding to cover the same ground would be productive.

Certainly the record did not justify commencing an industry-wide inquiry. To the extent the integrators' allegations contained any specific details, they involved complaints about Intelsat, not SES or any other satellite operator. Moreover, there is simply no evidence that would warrant revision of the Commission's policies, which provide a balanced and flexible approach to addressing satellite operators' management of their fleets.

Satellite facility deployment and expansion decisions are made in the context of economic and competitive considerations that require an operator to plan carefully to meet customer needs. This involves weighing multiple factors involving demand for capacity and service capabilities, availability of alternatives from competing satellite or terrestrial providers, and the costs of spacecraft design, construction, launch and operation. Having committed the resources to place a satellite in orbit, the operator is strongly motivated to make the most effective possible use of that asset to serve customers.

Recognizing the compelling nature of these market forces, the Commission has implemented policies that allow satellite operators substantial latitude to choose how best to

configure their networks in response to customer demand. This market-based approach underlies the Commission's policies with respect to assigning scarce spectrum, considering proposed changes in spacecraft deployment, and promoting service continuity with replacement satellites. The flexibility accorded to satellite operators under this framework is tempered by constraints designed to prevent warehousing so that valuable spectrum resources do not lie unused.

This regulatory structure should be retained. Contrary to the integrators' assertions, a decision to deploy an in-orbit spacecraft for follow-on capacity rather than launch a new replacement does not represent warehousing but may instead be the best way to meet customer needs for service continuity. Other scenarios discussed in the Notice – satellite license extensions and unused satellite capacity – also do not fall within the scope of what the Commission has defined as inappropriate warehousing because they do not involve any break in the availability of service.

The only scenario addressed by the Commission that could raise legitimate warehousing concerns is a gap in service following de-orbit or relocation of a spacecraft, and the Commission has demonstrated that its existing case-by-case approach is adequate to address such rare situations. Attempting to fashion blanket requirements to cover the varying facts presented when a service gap occurs because of either a satellite anomaly or a business decision would only constrain the Commission's flexibility without providing a countervailing benefit.

Similarly, the allegations of vertical foreclosure do not warrant Commission action. The integrators have not provided support for their claims and have certainly not shown any harm to customers or competition. The Commission must not permit its regulatory processes to be used in an attempt to circumvent government decisions regarding how to procure satellite services in the most efficient and cost-effective manner.

The Commission should reconfirm its commitment to current policies that allow satellite operators to respond proactively to customer demand and shifting economic and market conditions. It should reject the proposals for new regulatory burdens on satellite operators and terminate this proceeding.

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COMMENTS OF SES S.A.

SES S.A. ("SES") hereby responds to the Commission's Notice of Inquiry in the above-captioned proceeding,[1] which seeks further input on claims of anticompetitive behavior in the satellite capacity market. The Commission should conclusively reject these frivolous allegations and reaffirm its policies that allow satellite operators the flexibility to deploy assets in response to customer demand.

I. INTRODUCTION

SES questions the need for the instant proceeding. The Commission determined in both 2007 and 2008 that the satellite services market was characterized by effective competition.[2] More recent evidence presented to the Commission confirms that satellite

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[1] *Issues Related to Allegations of Warehousing and Vertical Foreclosure in the Satellite Space Segment*, Notice of Inquiry, IB Docket No. 13-147, FCC 13-79 (rel. June 7, 2013) ("Notice").

[2] *See Annual Report and Analysis of Competitive Market Conditions with Respect to Domestic and International Satellite Communications Services*, First Report, 22 FCC Rcd 5954, 5955, 6011 (2007) ("First Competition Report"); *Second Annual Report and Analysis of Competitive Market Conditions with Respect to Domestic and International Satellite Communications Services*, Second Report, 23 FCC Rcd 15170, 15171, 15201 (2008) ("Second Competition Report").

operators continue to face robust and growing competition, both intramodal and intermodal.[3] Because of that competition and the economics of the marketplace, satellite operators are highly motivated to use satellite assets and orbital resources efficiently to respond to customer demand.

These market incentives are buttressed by the Commission's existing regulatory framework. The Commission has implemented rules to promote timely initiation of satellite services[4] and facilitate service continuity thereafter.[5] Within these constraints, satellite operators are given significant flexibility to deploy their spacecraft in a way that responds to evolving market demand and meets their business objectives.[6]

The record provides no significant evidence of a problem that would justify revisiting these long-standing and effective Commission policies. In its Third Competition Report, the Commission considered allegations of both warehousing and vertical foreclosure and determined that there was insufficient information presented on either issue.[7] Nothing has changed since then to warrant further exploration of these unsupported claims.

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[3] *See, e.g.*, Comments of the Satellite Industry Association, IB Dkt No. 10-99, filed Aug. 23, 2010 ("SIA 2010 Comments") at 3-21; Reply Comments of the SES WORLD SKIES, IB Dkt No. 10-99, filed Sept. 24, 2010 ("SES 2010 Reply Comments") at 2-12.

[4] *See* 47 C.F.R. § 25.164 (milestones for construction and launch of new satellites) & § 25.165 (bond requirements).

[5] *See* Notice at ¶ 8 (discussing the Commission's "replacement expectancy" policy for satellite operations).

[6] *See, e.g., Amendment of the Commission's Space Station Licensing Rules and Policies,* Second Report and Order, 18 FCC Rcd 12507, 12509, ¶ 7 (2003) (the Commission has "allowed satellite operators to rearrange satellites in their fleet to reflect business and customer considerations where no other public interest factors are adversely affected") (footnote omitted).

[7] *Third Report and Analysis of Competitive Market Conditions with Respect to Domestic and International Satellite Communications Services,* Third Report, 26 FCC Rcd 17284, 17286, ¶ 3 (2011) ("Third Competition Report") ("because of the limitations of the record before us, and because the evidence that is available has mixed implications, we cannot make meaningful findings at this time regarding the allegations of anticompetitive conduct made by resellers/integrators against FSS operator Intelsat").

In short, there is no justification to revise Commission rules and policies. The existing regulatory framework serves the public interest because it permits the Commission to police anticompetitive actions, when warranted, while allowing satellite operators the flexibility to respond to customer requirements. This balanced framework should be retained.

II. ECONOMIC FORCES GIVE SATELLITE OPERATORS STRONG INCENTIVES TO USE ASSETS EFFICIENTLY TO MEET CUSTOMER NEEDS

The Notice solicits yet another round of comment on stale and unsupported claims by a few "integrators" suggesting that satellite operators' actions should be deemed anticompetitive.[8] The Commission recognizes, however, that the integrators' interpretation is not the only one and asks whether instead satellite operators "are engaging in conduct that has resulted in efficiencies and lower costs that benefit consumers."[9] A review of the market forces that shape satellite operators' actions makes clear that decisions regarding deployment of new satellites, and redeployment of existing satellites, are driven by the economic imperative to be responsive to customer demand.

As the Commission has previously recognized, the satellite business is extremely capital-intensive[10] and high-risk.[11] Construction and launch of a single satellite represents an

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[8] The initial allegations of anticompetitive behavior were made by CapRock and ARTEL in 2010 and were repeated in 2011 during the pleading cycle that led to issuance of the Third Report. *See* Notice at ¶ 4 & n.8.

[9] *Id*. at ¶ 2.

[10] *See* Second Competition Report, 23 FCC Rcd at 15183, ¶ 45 ("the communication satellite industry faces a capital intensive cost structure"); *see also id*. at 15182, ¶ 43 ("the capital investment in both space and ground segment and satellite launch is large, mostly fixed, and largely sunk").

[11] *See id.* at 15184, ¶ 50 ("Both incumbent firms and entrants in the communications satellite services industry face substantial business risk, *i.e*., variability in earnings attributable to fluctuations in demand, variability of output and input prices, and the pervasiveness of fixed costs in the firm's cost structure.") (footnote omitted).

investment of hundreds of millions of dollars. Furthermore, satellites have long lead times: planning, building, and launching a new or replacement satellite takes several years.[12] Unlike other parts of the communications industry where it is possible to build as you earn, virtually all of a satellite operator's costs must be incurred upfront before any revenue can be earned.[13] Recovering the upfront costs and making a profit on this initial investment is then dependent upon the successful launch and good health of the satellite, as well as the ability to earn revenue from the satellite for the fifteen or more years that the satellite is then expected to be in orbit. If the launch fails, if the satellite experiences anomalies, if the spectrum cannot be used to provide service, or if the predicted demand fails to materialize or is now served by a competitor, then the satellite operator may never recover its upfront investment, let alone profit from its entrepreneurial risk-taking.

As a result, when SES or any other satellite operator considers when and how to build a new satellite or replace an existing satellite, a variety of factors come into play. The operator must be reasonably confident that it has the spectrum rights at the slot for the satellite. It must do its best to project demand over a period of two decades or more, based on market research, discussions with customers and leads, and in-house market modeling.[14] On the cost side, it must determine the likely capital expenditure (including construction, launch, and insurance) required for a new spacecraft that would meet the projected customer demand, based on internal assessments and discussions with manufacturers and launchers.

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[12] *See id.* at 15186, ¶ 56 ("capacity expansion by satellite carriers involves long lead times to plan, design, and finally launch new spacecraft").

[13] *See* First Competition Report at 5983, ¶ 89 ("satellite capacity cannot be augmented one transponder at a time in response to growth in demand for satellite communications services").

[14] *See* Second Competition Report at 15186, ¶ 56 (decisions to add new satellite capacity involve "forecasting future demand over a long time horizon").

The operator must also take into account competing sources of capacity. The Commission concluded in 2008 that there was effective competition in the satellite industry,[15] and if anything, there is more competition today. New Fixed-Satellite Service ("FSS") entry has occurred by both private satellite operators such as ViaSat[16] and Avanti,[17] and national satellite systems, including Venesat[18] and SupremeSAT.[19] SES and other established satellite operators also have launched and are continuing to launch substantial new capacity.[20] In addition, there is increasing overlap between the services provided by FSS and MSS networks, with FSS operators providing capacity used for aeronautical, maritime, and terrestrial mobile services,[21] and MSS

[15] *See id.* at 15171, ¶ 2.

[16] *See* "ViaSat-1 Satellite Reaches Geosynchronous Orbit," Nov. 3, 2011, available at http://www.viasat.com/news/viasat-1-satellite-reaches-geosynchronous-orbit.

[17] *See* "Hylas 1 & 2 Coverage," available at http://www.avantiplc.com/fleet-coverage/coverage (discussing Avanti's launch of the Hylas 1 and 2 Ka-band satellites in 2010 and 2012, respectively).

[18] *See* "Simon Bolivar satellite benefits more than 3 million people," Oct. 29, 2012, available at http://www.avn.info.ve/contenido/simon-bolivar-satellite-benefits-more-3-million-people.

[19] *See* Supremesat Press Release, Nov. 28, 2012, available at http://www.supremesat.com/supremesat_press_release.php (describing launch of SupremeSAT-1, Sri Lanka's first communications satellite).

[20] *See* SES: Upcoming launches, available at http://www.ses.com/4233127/upcoming-launches (launches scheduled through 2015 will provide replacement capacity and "increase the available capacity by 22% over the baseline at year-end 2011"); *see also* Intelsat: Past Launches, available at http://www.intelsat.com/infrastructure/satellites-and-coverage-maps/past-launches/ (eight new satellites were successfully launched in 2010-2012).

[21] *See SkyTerra Communications, Inc. and Harbinger Capital Partners Funds*, Memorandum Opinion and Order and Declaratory Ruling, 25 FCC Rcd 3059, 3080 (2010) ("Services once provided exclusively by mobile satellite operators are now also being provided by fixed satellite services ('FSS') operators and certain terrestrial wireless operators.").

networks such as Inmarsat's Global Xpress introducing services that compete directly with FSS offerings.[22] Satellite operators also face substantial competition from terrestrial sources.[23]

Considering these demand, supply and cost variables, the satellite operator must then perform financial modeling to determine the expected return on investment in a new satellite and evaluate whether the return justifies the capital expenditure and risks involved in undertaking the project. Based on this analysis, the satellite operator decides whether to begin the process of procuring a new spacecraft or whether customer demand could be better met through redeploying an older, in-orbit satellite.

These economic and competitive factors ensure that satellite operators have every incentive to make satellite construction, replacement and deployment decisions in a way that is responsive to customer needs and that results in robust use of spectrum and orbital resources. Put simply, a satellite operator can earn the revenue needed to justify its significant upfront investment in transponder capacity only if it can attract and maintain customers over the useful life of the satellite. An operator that fails to satisfy its customers' requirements with respect to the quality, capabilities and pricing of its services will find those customers going elsewhere to purchase capacity.

III. COMMISSION POLICIES PROVIDE MUCH-NEEDED FLEXIBILITY WHILE PROMOTING ROBUST USE OF SPECTRUM AND ORBITAL RESOURCES

Given the market forces that drive the decisions of satellite operators, highly prescriptive regulation of satellite construction, replacement and redeployment decisions is

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[22] *See, e.g.,* "Broadcast Media: Taking the complexity out of global high-speed connectivity," available at http://www.igx.com/broadcast-media (describing suitability of Inmarsat Global Xpress capacity for fixed links).

[23] *See* SES 2010 Reply Comments at 3-4; *see also* Third Competition Report, 26 FCC Rcd at 17296-97, ¶¶ 26-30 (discussing availability of terrestrial alternatives to satellite capacity).

unnecessary and would be counterproductive. Instead, the Commission has recognized that the satellite operator is best placed to evaluate the market conditions and market risks associated with these decisions. Only a very few factual scenarios raise possible concerns about "warehousing,"[24] and the Commission already has the policies and authority to police those rare cases.

The Commission has accorded satellite operators significant flexibility in establishing and managing their fleets, recognizing that this approach is best suited to ensuring efficient use of limited spectrum and orbital resources. The Third Competition Report describes this policy:

> to address the fact that spectrum is scarce, the Commission has progressively implemented a more flexible, market-oriented model of spectrum assignment for commercial satellite services. . . . [T]he Commission, coupled with certain safeguards against speculation, has also made it easier for licensees to sell their licenses, and instituted secondary market reforms where satellite bandwidth can be put to more efficient uses in response to changing conditions and consumer demands.[25]

The safeguards against speculation referred to by the Commission include milestones and bond requirements designed to ensure that satellite licensees are committed to proceeding with system implementation.[26]

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[24] The Notice indicates that "[s]ince 2010, we have received nearly two dozen applications that involve potential warehousing issues." Notice at 6 n.30. In support, the Notice refers to the cases cited in footnotes 31, 34, 35, 40 and 45. But the cases cited in these footnotes number only ten in total, and as discussed in more detail below, most of the applications do not raise concerns about warehousing as it has been defined by the Commission in past adjudications.

[25] Third Competition Report, 26 FCC Rcd at 17338, ¶ 140 (footnotes omitted).

[26] 47 C.F.R. §§ 25.164 & 25.165.

The Commission's market-oriented model recognizes that operators, not regulators, should be making fleet deployment decisions. As the International Bureau has explained:

> the Commission attempts, when possible, to leave spacecraft design decisions to the space station licensee *because the licensee is in a better position to determine how to tailor its system to meet the particular needs of its customers*. Consequently the Commission will generally grant a licensee's request to modify its system, provided there are no compelling countervailing public interest considerations.[27]

This framework allows satellite operators to rearrange spacecraft assets in response to shifting economic conditions. The Commission has emphasized that:

> We recognize that economic conditions can change during the time it takes to construct and launch a satellite. Therefore, we generally permit licensees to modify their systems to adapt to changing business and customer needs.[28]

The Commission's replacement expectancy policy similarly reflects the economic realities of the satellite industry:

> [The Commission] has recognized that given the huge costs of building and operating space stations, there should be some assurance that operators will be able to continue to serve their customers from the same orbital location as these operators retire and replace older satellites. Without this assurance, space station operators would be required to undertake the potentially disruptive and costly process of re-pointing customer antennas to space stations at different

[27] *AMSC Subsidiary Corp.*, Order and Authorization, 13 FCC Rcd 12316, 12318, ¶ 8 (Int'l Bur. 1998) ("AMSC Modification Order") (emphasis added; footnote omitted).

[28] *Amendment of the Commission's Space Station Licensing Rules and Policies*, First Order on Reconsideration and Fifth Report and Order, 19 FCC Rcd 12637, 12653, ¶ 39 (2004) ("Fifth Space Station Licensing Order") (footnote omitted).

> locations. Consequently, the Commission generally permits operators to construct and launch replacement satellites at the same location and operate them in the same frequency bands as the retired satellite, without considering competing applications.[29]

This existing regulatory framework facilitates satellite operators' ability to make choices regarding how best to make use of their fleets to serve customers, subject to the Commission's policies against warehousing. The Commission has stated that the flexibility it has accorded to satellite licensees:

> to adjust to changed circumstances and to better serve their customers' needs . . . does not extend to allowing orbit and spectrum resources to lie fallow while a licensee decides whether to proceed at all with its business plan.[30]

As the Commission has explained, "warehousing could hinder the availability of services to the public at the earliest possible date by blocking entry by other entities willing and able to proceed immediately with the construction and launch of their satellite systems."[31] Preventing warehousing is the purpose of the Commission's satellite milestone and bond requirements, which require a licensee to demonstrate that it is proceeding to design, build and launch a satellite on a timely basis and penalize the licensee if it does not do so.[32] Thus, the crux of the Commission's description of warehousing is that a licensee is preventing the delivery of service to the public by failing to deploy a satellite while continuing to hold rights for the unused spectrum and orbital resources. By definition, then, an operator who has deployed its facilities as authorized to provide service to customers cannot be engaged in warehousing.

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[29] Notice at ¶ 8 (footnotes omitted).

[30] Fifth Space Station Licensing Order, 19 FCC Rcd at 12653, ¶ 39.

[31] *Amendment of the Commission's Space Station Licensing Rules and Policies*, First Report and Order and Further Notice of Proposed Rulemaking, 18 FCC Rcd 10760, 10827, ¶ 173 (2003).

[32] *See id.*

Taken together, existing Commission policies reflect a balanced approach that serves the public interest. The Commission appropriately recognizes that specific decisions with respect to how best to respond to customer needs should be made by satellite operators, subject to anti-warehousing policies designed to ensure that satellite spectrum and orbital resources are used for delivery of services and do not lie fallow.

IV. THE RECORD DOES NOT JUSTIFY CHANGING THE CASE-BY-CASE APPROACH TO EVALUATING POTENTIAL WAREHOUSING SCENARIOS

No change is needed in the Commission's policies designed to prevent warehousing. Under the current framework, the Commission considers potential "warehousing" situations on a case-by-case basis.[33] This flexible approach, which allows the Commission to take into account the specific factual circumstances in making a public interest determination, should be retained.

A. No Party Has Demonstrated that Warehousing Is Occurring

The Notice recognizes that the record developed in preparation of the Third Competition Report provides "very limited" factual information to support claims of warehousing made against satellite operators.[34] SES strongly agrees. In fact, the allegations cited by the Commission do not even come within the meaning of the term warehousing as it has been applied in satellite decisions.

Instead, CapRock has asserted that "Intelsat and 'other satellite operators' are 'warehousing' scarce orbital resources by failing to replace aging satellites on a timely basis or

[33] Notice at ¶ 13.

[34] *Id*. at ¶ 6.

otherwise failing to provide transponder capacity that reflects current technology."[35] CapRock claimed that these actions "restrict the availability and quality of transponder capacity at particular orbital locations and deny competitors access to orbital locations they might use more efficiently."[36]

A review of CapRock's 2010 pleading shows that the company's allegations are completely unsupported by any examples or specific facts.[37] But even if one assumes for the purpose of argument that the behavior CapRock describes has actually occurred, it does not establish warehousing or any other violation of the Commission's policies.

As noted above, warehousing occurs when a satellite licensee retains spectrum rights but does not deploy facilities to provide service. Thus, the cases where the Commission has acted to prevent warehousing involved the failure to construct, launch and operate an authorized satellite[38] or the failure on a timely basis to restore capacity following a satellite

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[35] Notice ¶ 4, *citing* Comments of CapRock Communications, Inc., IB Docket No. 10-70, filed April 7, 2010 ("CapRock 2010 ORBIT Act Comments") at 12-15.

[36] Notice ¶ 4.

[37] *See* CapRock 2010 ORBIT Act Comments. To the extent that there are any details included in the 2010 CapRock pleading, they involve Intelsat, not SES. *See id.* at 1-2 ("These Comments focus on Intelsat and its wholly-owned subsidiary Intelsat General Corporation") (footnote omitted). CapRock's requests for new Commission intervention in the satellite industry appear to be intended to try to thwart the measures that have been taken to increase competition for government procurement of satellite services. *See* SES 2010 Reply Comments at 14-16.

[38] *See, e.g., Spectrum Five LLC,* Memorandum Opinion and Order, 26 FCC Rcd 10448, 10451, ¶ 7 (Int'l Bur. 2011) (denying request for extension of implementation milestones, noting that "strict enforcement of milestones ensures that valuable spectrum resources are efficiently used and are not 'warehoused,'"); *VisionStar Inc.*, Memorandum Opinion and Order, 19 FCC Rcd 14820, 14822, ¶ 5 (Int'l Bur. 2004) (revoking a license for failure to meet applicable milestones, observing that "[m]ilestones ensure speedy delivery of service to the public and prevent warehousing of valuable orbit locations and spectrum, by requiring licensees to begin operation within a certain time") (footnote omitted).

anomaly.[39] In contrast, a decision to use an in-orbit spacecraft for follow-on capacity rather than building and launching a new replacement satellite provides for continuity of service and therefore does not implicate the Commission's anti-warehousing policy. Instead, such a decision is consistent with the flexibility accorded to satellite operators to determine how best to meet customer requirements and earn an adequate return on investment.

The Commission has never suggested that satellite operators have an obligation to deploy "state-of-the-art technology" without regard to whether it is economic to build and launch a new satellite. As SES has shown, choosing how to satisfy customer requirements for follow-on capacity involves a myriad of quite complex market assessments. Assuming that the only correct course of action is to build and launch a new spacecraft ignores the fundamental economics of the satellite business. In many cases, customer demand for satellite service at an orbital slot is strong, and the economic case for a new replacement satellite is easy to justify. But it is only natural for there also to be cases in which market demand is weak such that a brand new replacement satellite is not justified. In such cases, it may make better economic sense to use an existing asset to meet demand. The satellite operator is best placed to make that assessment.

Furthermore, the facts do not bear out CapRock's suggestion that the actions of existing satellite operators deny access to orbital slots that competitors could use more efficiently. When the Commission has announced that orbital and spectrum resources are available due to a satellite operator's decision not to seek replacement authority, other market participants have been able to seek entry. However, it is also clear that some slots and

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[39] *See, e.g., DISH Operating LLC,* Memorandum Opinion and Order, 27 FCC Rcd 5923, 5923, ¶ 1 ("DISH 148° W.L. Order") ("Allowing DISH to continue to suspend operations at a location that it has left vacant for over two years – and for which it still has no committed plans – would allow DISH to warehouse scarce orbit and spectrum resources, contrary to Commission policy.").

frequencies go unclaimed altogether. For example, when the Commission made the 77° W.L. and 79° W.L. orbital positions available for re-assignment,[40] DIRECTV filed applications for the Ku-band frequencies under the Commission's first-come, first served rules.[41] In contrast, no party is currently seeking the C-band rights at either 77° W.L. or 79° W.L. or the Ku-band rights at 129° W.L., all of which have been available for reassignment under the Commission's rules for some time.[42]

In short, nothing in CapRock's pleadings provides evidence that satellite operators are actually engaged in warehousing that is blocking efficient spectrum use. As a result, the CapRock claims do not justify any change in the Commission's approach to handling warehousing allegations.

B. The Commission Should Maintain its Case-by-Case Approach

The Notice's discussion of warehousing is not limited to the CapRock allegations. Instead, the Commission seeks comment on whether new Commission rules or policies are needed to address several specific factual scenarios.[43] None of these merits a change in the

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[40] *See* Public Notice, 26 FCC Rcd 6798, 6799 (Int'l Bur. 2011) (C- and Ku-band frequencies previously licensed to PanAmSat at the nominal 77º W.L. location available for reassignment); Public Notice, 27 FCC Rcd 2040, 2041 (Int'l Bur. 2012) (C- and Ku-band frequencies previously licensed to SES Americom at the nominal 79º W.L. location available for reassignment).

[41] *See DIRECTV Enterprises, LLC,* File No. SAT-LOA-20121101-00190, Call Sign S2888 (grant-stamped April 18, 2013) (license for new Ku-band space station at 76° W.L. following announcement of availability of spectrum at 77° W.L.); *DIRECTV Enterprises, LLC,* File No. SAT-LOA-20120316-00051, Call Sign S2861 (grant-stamped July 12, 2012) (license for new Ku-band space station at 79° W.L.).

[42] The spectrum at the nominal 77º W.L. location has been available since 2011, and the spectrum at the nominal 79º W.L. and 129º W.L. locations was made available in 2012. *See supra,* n.40; *see also Intelsat Licensee LLC,* Memorandum Opinion and Order, 27 FCC Rcd 11234, 11240, ¶ 18 (Int'l Bur. 2012) ("Intelsat 129° W.L. Order") (making Ku-band spectrum at 129º W.L. available as of October 2, 2012).

[43] Notice at ¶¶ 13-21.

Commission's regulatory approach. Instead, the proposals for increased regulatory oversight directly conflict with the Commission's long-standing and reasoned acknowledgment that satellite licensees are best positioned to make the market and risk assessments inherent in determining whether to replace and how to deploy spacecraft to serve customer requirements.

Gaps in Service: First, the Commission asks whether it needs to adopt new rules to handle gaps in service that arise "when an operator de-orbits or relocates an in-orbit satellite, and does not immediately place another satellite into the vacated orbital location."[44] This is the only category listed in the Notice that could be viewed as warehousing as defined in the Commission precedent discussed above because no service is being provided during the time of the gap.

As the Notice recognizes, gaps in service can result from the unexpected failure of an in-orbit spacecraft or from a business decision by the satellite operator.[45] In either event, such gaps are rare – the Commission identifies only three examples in the last five years.[46] Thus, the suggestion elsewhere in the Notice that satellite moves "frequently produce lapses in service"[47] is not supported by the record.

The Commission states that its policy is to evaluate "such requests on a case-by-case basis, attempting to balance the 'warehousing' concern against the need for operator flexibility."[48] SES advocates retention of this approach, which allows consideration of the

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[44] *Id.* at ¶ 13.

[45] *Id.*

[46] *Id.* at n.31, *citing* Intelsat 129° W.L. Order; DISH 148° W.L. Order; and *PanAmSat Licensee Corp.*, Memorandum Opinion and Order, 27 FCC Rcd 2479 (Int'l Bur. 2012) ("PanAmSat 72° E.L. Order").

[47] Notice at ¶ 10.

[48] *Id.* at ¶ 13.

specific facts presented in each instance. In the cases cited in the Notice, the International Bureau took into account a variety of factors in determining whether an operator's action to restore service following a satellite anomaly was reasonable and timely, including the duration of the gap in service, the unexpectedness of the anomaly, and the scope of the efforts required to restore service.[49] SES does not believe attempting to fashion a one-size-fits-all rule would be feasible in light of the many elements to be considered in addressing such cases.

The Commission asks whether it should forbid any gaps in service that result from a business decision, rather than a satellite failure.[50] Alternatively, the Commission inquires whether it should adopt a rule analogous to Section 25.161(c), which provides that a license will terminate if the facilities are removed such that the station is not operational for more than 90 days unless specific authority is requested.[51] Taking either of these approaches would only constrain the Commission's discretion unnecessarily

A strict prohibition on any gap in service not related to a satellite failure would ignore the possibility that a time-limited interruption in service at a given orbital location could permit a satellite operator to better serve its customers and benefit the public interest. For example, the International Bureau in 2006 granted applications to allow SES to temporarily relocate AMC-16 away from 85° W.L. in order to meet customer demand for service at another location where launch of a satellite had been delayed.[52] Under the circumstances presented, the

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[49] In two of the decisions, the International Bureau concluded that based on the totality of circumstances presented, the operator had retained a replacement expectancy. *See* Intelsat 129° W.L. Order, 27 FCC Rcd at 11239, ¶ 13; PanAmSat 72° E.L. Order, 27 FCC Rcd at 2483, ¶ 10. In the third decision, the Bureau rejected the satellite operator's rationale for retaining the spectrum rights. *See* DISH 148° W.L. Order, 27 FCC Rcd at 5928-29, ¶ 16.

[50] Notice at ¶ 13.

[51] *Id.* at ¶ 14, *citing* 47 C.F.R. § 25.161(c).

[52] *SES Americom, Inc. and EchoStar Satellite L.L.C.,* 21 FCC Rcd 3430 (Int'l Bur. 2006).

Bureau found that allowing relocation would "allow early commencement of Ku-band DTH FSS service to U.S. customers" and would therefore "improve the choice of service to consumers."[53]

In the AMC-16 case, the duration of the relocation was longer than 90 days, and the Bureau evaluated the application in the context of Section 25.161(c).[54] The Bureau granted a waiver of that rule, observing that the relocation was for a short duration with a defined end date, and the temporary use would satisfy customer requirements without any lapse in service.[55] In more recent cases, the Commission has determined that Section 25.161(c) does not by its terms apply to gaps in the provision of satellite service at an orbital location.[56]

Adopting an across-the-board 90-day rule here to cover gaps in service would not be appropriate. On one hand, in a case not involving a satellite emergency, the Commission may feel that permitting a 90-day gap is too long if the request is not supported by adequate justification. On the other hand, if an in-orbit satellite fails, limiting a lapse in service to 90 days will be unreasonably strict because arranging for substitute or replacement capacity will typically take much more than 90 days. Trying to set a limit on service gaps in advance does not permit the Commission the latitude to determine what is reasonable under a particular set of circumstances, whereas the Commission's current case-by-case approach allows consideration of all the relevant facts. Given how seldom service gap situations arise, SES does not believe it would be practical or efficient to attempt to develop specific rule language to address them.

The Commission also asks whether new regulation is needed to address situations when not all of the frequency bands currently in use are included on a replacement or follow-on

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[53] *Id.* at 3431, ¶ 1.

[54] *Id.* at 3434, ¶ 9.

[55] *Id.*

[56] *See, e.g.*, DISH 148° W.L. Order, 27 FCC Rcd at 5927-28, ¶¶ 13-14; Intelsat 129° W.L. Order, 27 FCC Rcd at 11239, ¶¶ 14-15; *see also* Notice at ¶ 14 & n.33.

satellite.[57] The Commission suggests that its ability to promptly make frequencies available for reassignment has been hampered when an operator does not acknowledge that the frequencies will no longer be in use.[58] The Commission seeks comment on whether any new requirements should be imposed, such as an obligation to include in a replacement application a table listing the frequencies in the original and replacement satellites.[59]

The facts in the cases cited by the Commission,[60] however, do not support the claim that the delay in making frequencies available is attributable to the applicant's failure to be clear with respect to its intentions. For example, the Intelsat 22 replacement application referenced by the Commission did contain a table that specifically identified what frequencies had been used on the Intelsat 4 spacecraft that had suffered an anomaly and had to be deorbited, the frequencies that were being used by the interim satellites operating at the nominal 72° E.L. orbital location, and the frequencies included on the Intelsat 22 replacement satellite.[61] Moreover, the Commission's grant of the Intelsat 22 application expressly acknowledged that certain extended Ku-band frequencies used by the interim spacecraft at 72° E.L. had not been requested for Intelsat 22.[62] Yet instead of making the frequencies available for reassignment, the grant simply indicated that the action was "without prejudice" to any future decision regarding

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[57] Notice at ¶ 13.

[58] *Id.*

[59] *Id.*

[60] *See id.* at n.35, *citing* cases involving the Intelsat-14 replacement satellite at 45° W.L., the Intelsat-22 replacement satellite at 72.1° E.L., the relocation of Horizons 2 from 74.05° W.L. to 84.85° W.L.; and the use of Intelsat 1R to replace Intelsat 705 at 50° W.L.

[61] *See Intelsat Licensee LLC,* IBFS File No. SAT-LOA-20110929-00193, Call Sign S2846, Legal Narrative at 6.

[62] *See Intelsat Licensee LLC,* IBFS File No. SAT-LOA-20110929-00193, Call Sign S2846, grant-stamped Mar. 15, 2012, Attachment to Grant at 1 n.3.

Intelsat's replacement expectancy for the extended Ku-band spectrum at that orbital location.[63] The Commission's delay in announcing the availability of the frequencies at 72° E.L. contrasts with the Intelsat 129° W.L. Order, which held that Intelsat was not entitled to a Ku-band replacement expectancy and specified a date a week later on which new applications for the Ku-band rights could be filed.[64]

Thus, in each of the four cases referenced in the Notice, the relevant grant document makes clear that the Commission was aware of the operator's intention to no longer use certain frequencies. Nor does it appear that the applications discussed involved any attempt by the satellite operator to retain rights for the spectrum that it no longer planned to use. Given the facts, there is simply no basis for the Commission's suggestion that these cases raise warehousing concerns or justify new regulatory requirements on satellite operators.

Older "Replacement" Satellites: The Notice asks whether the Commission should regulate situations where an operator proposes to use an in-orbit satellite to provide follow-on

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[63] *Id. See also Intelsat Licensee LLC,* SAT-MOD-20110928-00190, Call Sign S2423, grant-stamped Jan. 31, 2012, Attachment to Grant at 2, ¶ 8 & n.1 (grant of authority to relocate Horizons 2 is "without prejudice" to replacement expectancy at the vacant 74.05° W.L. location where Horizons 2 previously operated); *Intelsat North America LLC,* SAT-MOD-20100115-00010, Call Sign S2395, grant-stamped Sept. 17, 2010, Attachment to Grant at 2, ¶ 9 & n.2 (grant of authority to relocate Intelsat 705 is "without prejudice" to replacement expectancy at 50° W.L. for bands not included on the Intelsat 1R replacement satellite).

Similarly, at the 45° W.L. location, the Intelsat 14 replacement application expressly stated that extended Ku-band frequencies on Intelsat 1R were not included on the replacement spacecraft (*see PanAmSat Licensee Corp.*, IBFS File No. SAT-RPL-20090123-00007, Call Sign S2785, Legal Narrative at 7 n.18), and the Commission's grant of the Intelsat 14 application acknowledged the omission of those frequencies. *See id.*, grant-stamped Oct. 1, 2009, Attachment to Grant at 1 n.1. Yet the frequencies were not made available for reassignment until May of 2012, more than two years after Intelsat 14 replaced Intelsat 1R. *See* Public Notice, 27 FCC Rcd 5016, 5017 (Int'l Bur. 2012) (Intelsat 14 replaced Intelsat 1R in December of 2009; the extended Ku-band frequencies at the nominal 45º W.L. location are available for reassignment effective May 8, 2012).

[64] *See* Notice at n.34, *citing* Intelsat 129° W.L. Order, 27 FCC Rcd at 11234.

capacity instead of building a new replacement for a spacecraft reaching its end of life.[65] The Commission acknowledges that such situations do not involve a gap in service.[66] The Notice seeks input on whether the Commission should depart from its existing practice of considering such requests on a case-by-case basis.[67]

As SES has previously explained, a satellite operator decides if it should use an in-orbit spacecraft to provide follow-on capacity rather than building and launching a new replacement based on specific demand and cost data.[68] The Notice recognizes the relevant economic realities, observing that a satellite operator may decide that "it can adequately service its existing customer base from a certain location using an older satellite."[69] Because use of an existing spacecraft as a follow-on allows continuity of service, these situations do not implicate the Commission's anti-warehousing policies as set forth in prior cases.

The record here does not provide any justification for a change in the Commission's approach to deployment of an in-orbit spacecraft to provide follow-on capacity. It would be unwise for the Commission to substitute its judgment for that of satellite operators in deciding whether the use of an existing satellite to continue service is appropriate or whether a new satellite should be constructed and launched. As the Commission has recognized, a satellite operator is in the best position to assess market conditions and customer demand[70] in order to determine whether the expected returns justify the expense and risk in building a new satellite.

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[65] Notice at ¶¶ 18-19.

[66] *Id*. at ¶ 18.

[67] *Id*.

[68] *See supra* Section II.

[69] Notice at ¶ 18.

[70] AMSC Modification Order, 13 FCC Rcd at 12318, ¶ 8.

Similarly, there is no justification for subjecting satellite operators to a possible loss of spectrum rights if a spacecraft is operating in inclined orbit.[71] As the Notice observes, inclined orbit operation has the benefit of extending a satellite's useful life.[72] Operators are also able to offer capacity on inclined orbit satellites at rates that are lower than those for comparable fully station-kept spacecraft. This can be an attractive option for customers, such as the U.S. military and commercial mobility customers, that deploy tracking antennas and therefore are indifferent to whether the satellite is inclined or not. The Commission should not take action that could deprive customers of this option. Instead, the Commission should make clear that placing a spacecraft in inclined orbit has no impact on the operator's rights to the relevant spectrum and orbital resources.

License Extensions: The Notice also requests input regarding extensions of satellite licenses beyond their initial terms.[73] Specifically, the Commission asks whether license extensions should be limited to a certain period or whether it should require additional information to be filed in support of an extension request.[74]

Both satellite operators and their customers benefit when a satellite is able to operate beyond the term of its initial license. The extended lifetime increases the time horizon over which a satellite operator needs to recover the sunk costs of a spacecraft. Granting license extensions for terms concurrent with the expected useful life of the satellite promotes efficient use of satellite assets and does not implicate the Commission's anti-warehousing policies because it allows service continuity. Satellite operators typically plan to launch replacement

[71] Notice at ¶ 19.

[72] *Id*.

[73] *Id*. at ¶ 20.

[74] *Id*.

satellites well in advance of an existing satellite's expected end of life in order to mitigate the risk of a launch failure and therefore often have satellites with remaining useful lives that have already been replaced.

These assets can be used for a variety of productive purposes. Given the large upfront costs and risks inherent in the satellite industry, the use of older satellites to initiate service from a new orbital position can be seen as a useful risk mitigation strategy on the part of satellite operators. Being able to assess the spectrum and market potential of a new orbital slot before committing a purpose-built new satellite enables the satellite industry to commence new services that may otherwise be too uncertain to develop with a brand new asset. There is also an active secondary market for in-orbit satellites. Satellite operators sometimes need interim capacity, for example to cover for a launch delay or failure or to initiate service early. Other satellite operators may have available assets to fulfill such needs due to early replacement of an older but healthy spacecraft.

In all these instances, the option of using a satellite that it beyond its initial license term but still capable of providing service is an important mechanism for providing service to customers. The Commission has used its case-by-case approach to facilitate such developments in the past, to the ultimate benefit of the public. Recent examples include the redeployment of DIRECTV 1R to the nominal 56° E.L. orbital location to provide bridge service to the Russian Satellite Communications Company pending the launch of a replacement satellite that had been delayed[75] and the use of AMC-2 at the nominal 81° W.L. orbital location[76] to allow the provision of service pending the planned launch of the ARSAT-2 satellite.

[75] *See DIRECTV Enterprises, LLC*, File No. SAT-A/O-20120817-00137, Call Sign S2369 (grant-stamped Dec. 21, 2012), Narrative at 2.

The Commission's current practice of considering individual satellite operator requests for license extensions to reflect the spacecraft's useful life is reasonable and should be retained. SES sees no advantage to any of the alternatives suggested in the Notice, such as restricting the length of an initial extension and requiring an operator to reapply for further extensions.[77] That approach would simply increase paperwork for both operators and the Commission staff with no apparent benefit.

Underutilized Space Stations: Finally, the Notice asks whether the Commission should take steps with respect to space stations that are not operating at full capacity, such as automatically terminating a satellite license if the percentage of unused capacity exceeds a certain amount.[78] There is no justification in the record for such a drastic change in Commission policy.

As discussed above, satellite operators have every incentive to maximize the use of their assets to provide service to customers. That does not mean that every satellite can be expected to be fully utilized at all times. For example, when a new orbital location is being developed, it can take several years for demand to grow to substantial levels. Moreover, at times, there will be excess capacity in the market. In fact, the Commission has recognized that periodic excess capacity is an expected result of the economics of the satellite industry,[79] "given the lumpy nature of capacity expansion in the communications satellite industry and the favorable economics of expanding transponder capacity by large increments."[80]

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[76] *See SES Americom, Inc., LLC,* File No. SAT-MOD-20130225-00024, Call Sign S2134 (grant-stamped May 9, 2013).

[77] *Id*. at ¶ 20.

[78] *Id*. at ¶ 21.

[79] *See, e.g.,* Second Competition Report, 23 FCC Rcd at 15185-15188, ¶¶ 56-58.

[80] *Id*. at ¶ 58.

In light of these circumstances, it is not surprising that some satellites may have unused capacity at any given point in time. This certainly cannot be characterized as "warehousing" under the Commission's precedent because the satellite operator has deployed assets to offer service to customers. Terminating an operator's license due to market factors beyond its control – the "recurring imbalances between supply and demand" that the Commission has recognized are inherent in the satellite industry[81] – would serve no conceivable public interest objective. In fact, having some excess capacity in a market can be highly beneficial to customers, as it tends to downward pressure on prices. Some excess capacity also enables satellite operators to serve future growth in market demand in between satellite launches. In addition, some satellites serve as lightly-utilized, in-orbit spares that can be quickly deployed to restore service in the event of an in-orbit failure to another satellite.

Furthermore, there is no reason to believe that terminating a license for underutilization would result in more robust use of spectrum resources. If an operator with an existing satellite has been unable to attract sufficient demand to substantially fill a spacecraft, a different operator is extremely unlikely to fare any better.

Thus, the evidence before the Commission does not warrant any change in the Commission's current case-by-case approach to considering potential warehousing concerns. To the contrary, the record confirms that cases that implicate the Commission's anti-warehousing policies are quite rare and can be adequately handled under the flexible framework currently in place. Imposing new rules would only limit the Commission's latitude to address these few cases based on their specific facts.

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[81] *Id.*

V. INTEGRATORS' CLAIMS OF HARMFUL VERTICAL FORECLOSURE ARE BASELESS AND SHOULD AGAIN BE REJECTED

The record is similarly devoid of evidence that harmful vertical foreclosure is occurring and requires Commission intervention. Recognizing the lack of support for any such claims to date, the Notice properly places the burden on parties who are alleging foreclosure to bring forth detailed documentation of their allegations.[82] Furthermore, the Commission emphasizes that its policies are intended to protect competition, not competitors – absent evidence of harm to end users, there is no basis for Commission regulatory action.[83]

To date, the integrators have not put forward evidence to substantiate their claims of vertical foreclosure that meets these standards. Instead, as SES has previously discussed, the only specific allegations made by the integrators concern Intelsat and relate to a single contract award.[84] The U.S. General Accountability Office ("GAO") considered and rejected integrators' protests regarding the lawfulness of that award under applicable government contracts law more than three years ago.[85]

Furthermore, there is no evidence of anticompetitive behavior or harm to competition. As the Commission has recognized, a change in government contracting approach has eliminated the former policy that insulated integrators from direct competition with satellite operators and other resellers of capacity.[86] Specifically,

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[82] Notice at ¶ 30.

[83] *Id*. at ¶ 23.

[84] SES 2010 Reply Comments at 13-15.

[85] *See* Decision of the GAO in the Matter of CapRock Government Solutions, Inc.; ARTEL, Inc.; & Segovia, Inc., File Nos. B-402490; B-402490.2; B-402490.3; B-402490.4; & B-402490.5, May 11, 2010, available at http://www.gao.gov/decisions/bidpro/402490.pdf.

[86] Third Competition Report, 26 FCC Rcd at 17352, ¶ 179 & n.331.

> one large customer, the Department of Defense, has now abandoned its previous view that it benefited from procuring services via small reseller/integrator firms, and is transitioning (along with the General Services Administration (GSA)) to an open procurement process in which any entities, including resellers/integrators and satellite operators, may bid.[87]

Government customers have advised the GAO that they believe that the resulting increased competition will place downward pressure on prices.[88] As the Notice recognizes, allowing satellite operators to bid directly also cuts down on "double marginalization," making services more cost-effective and benefiting consumers.[89]

Given the economic and competitive forces it faces, SES has every incentive to ensure a return on its investment in satellite assets by offering capacity to any party who may be bidding on a government services contract. Indeed, for the specific Navy contract that sparked the integrators' complaint, SES made its capacity available to all interested parties who requested it. In cases where FCSA has allowed SES to bid directly for a contract award through its government services subsidiary, SES has also permitted other bidders to rely on SES capacity in their offers. SES's government services affiliate has not declined to bid on a contract solely because it was also supplying capacity to other bidders.

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[87] *Id*. at ¶ 179. As the Commission explains, this change occurred through the adoption of "a new joint GSA/Defense Information Systems Agency (DISA) contracting vehicle, the Future COMSATCOM Services Acquisition (FCSA) program, and the ending of . . . the Defense Information Systems Network Satellite Transmission Services-Global (DSTS-G) process." *Id*. at n.331; *see also* Notice at n.56.

[88] *See* United States Government Accountability Office, Report on Competition, Capacity and Costs in the Fixed Satellite Services Industry, GAO-11-177, September 2011 at 34-35 (discussing expectations that the new FCSA program will "increase competition among eligible vendors," and that competition "will exert a downward force on prices").

[89] Notice at ¶ 26 & n.53.

Events since FCSA was implemented confirm that integrators have not been unfairly excluded from competing for contract awards. SES does not have comprehensive information about the outcome of government bidding under FCSA, but DISA does, and the Commission should ask DISA for a complete breakdown of FCSA bid results to use in analyzing the issues raised in the Notice. Reviewing the limited internal data available to SES suggests that integrators and resellers continue to win a majority of the task orders issued under FCSA since its inception in 2011: of the orders for which SES has information regarding the winning bidder, roughly three-quarters of the awards went to entities not affiliated with operators of satellite facilities. Obviously, there has been no foreclosure if the integrators have continued to win task orders using SES's or Intelsat's capacity, even when in competition with SES or Intelsat.

In short, despite having had multiple bites at the apple both before the GAO and the Commission, the integrators have not shown that satellite operators have engaged in any anticompetitive vertical foreclosure. As the Commission has observed, it has received no complaints from customers who would have been harmed by such behavior if it had occurred.[90] Thus, the record does not support any further Commission action.

[90] Third Competition Report, 26 FCC Rcd at 17352, ¶ 178.

VI. CONCLUSION

Under the influence of market forces and existing Commission policies, satellite operators are motivated to optimize the use of their satellite fleets to meet customer demand. The record does not present evidence of anticompetitive behavior requiring Commission intervention. The Commission should therefore terminate this inquiry without taking further action.

Respectfully submitted,

SES S.A.

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